Applicant:

YANG, Shi, Heng

JC06 Rec'd PCT/PTO 31 MAY 2005

Int'l Filling Date:

February 06, 2004

**Priority Date:** 

April 17, 2003

Int'l Application No.:

PCT/CA2004/000163

**Int'l Publication No.:** 

WO 2004/092008 A1

Title:

A FRONT-MOUNTED WATER-SEPARATION

**PROPELLER** 

Mail Stop PCT Commissioner for Patents P.O.Box 1450 Alexandria VA 22313-1450 USA

To Whom It May Concern:

Subject: Written Opinion from a Maritime Expert for this Patent Application (Important)

Dear Official,

Since European Patent Office referred 3 US patents in the preliminary international searching report for my above-identified patent application and indeed that given written opinion is NOT fair to my invention totally, I wish you can evaluate my case carefully in the national stage.

As a reference, I would like to attach a written opinion from a maritime expert for the said patent application. I hope my intellectual property can be well protected in this great country. Your cooperation will be appreciated.

Yours Sincerely,

YANG, Shi, Heng April 22, 2005

10/537198

WO 2004/0092008 (PCT/CA2004/000163)

To: World Intellectual Property Organization, International Bureau

Whom it may be concerned,

RE: WO 2004/0092008 (PCT/CA2004/000163) Patent by Mr. ShiHeng Yang

Dear Sir/Madame,

I have looked through the three patents that are arguments against the patent application by Shiheng Yang. All three existing patents fundamentally provide a pressure to the rear of a vessel to force the vessel forward in the water. I have provided below my comments to support the patent application for the Front Mounted Water Separation.

Argument in support of the "Front Mounted Water Separation Propeller Entablature:

The fundamental principal of the Front Mounted Water Separation Propeller Entablature is to cause the reduction of water pressure on the bow of a vessel as it is propelled forward through the water. The reduction of the water pressure is achieved by allowing the water at the bow of the vessel to flow into the front entrance of the Front Mounted Water Separation Propeller Entablature. The water is then allowed to exit through the two reduced cross sectional area nozzles at high velocity that is developed by the internal propeller.

The exit of the water at high velocity causes a water separation at the bow of the vessel, thus reducing the water pressure on the bow and with the resultant effect of lowering the resistance of the vessel as it moves through the water.

The resultant effect being that the vessel can travel at the same speed but with a greatly reduced propulsion horsepower requirement.

I trust that the above will be of help in modifying the unfair NO Novelty and NO Inventive Step judgment for "Front Mounted Water Separation Propeller" patent from international bureau.

COUVER

Norman Whyte

Dec. 8 2004

## ADVISORY BOARD



Norman Whyte served a five year indentured apprenticeship at Messrs. Cammell Laird, Shipbuilders and Ship Repairs located in Birkenhead, Cheshire, England from 1959 to 1964. During this period gained a college certificate in mechanical engineering and, before leaving Cammell Laird in 1969, Norman completed six years in the engineering design office involved in the building of various vessels such as Navy Frigates, submarines and commercial product tankers

In 1969, Norman emigrated to Canada and worked at Davie Shipbuilding in Lauzon Quebec as a design engineer and estimator for six years during which time he was involved in the design and building of product tankers, bulk carriers and ferries.

From 1975 to 1989 Norman was invited to join Burrard Dry Dock in Vancouver as Manager of Engineering, heading up the mechanical engineering office during the building of Canadian Coast Guard ice breakers, passenger/vehicle ferries, offshore supply vessels and many other types of vessels. Responsibilities included mechanical system design and arrangements, selection and purchasing of machinery, supervision of the engineers and design schedule control. Also during this period Norman served five years as an advisory board member for the Engineering Faculty of the British Columbia Institute of Technology.

Norman joined Cullen Detroit Diesel as Engineering Manager in their Co-generation and generator packaging division from 1989 to 1992. His responsibilities included managing all design for structural, electrical/electronic and mechanical components of each package; the selection and purchase of machinery and raw materials and coordination of subcontracted assemblies; and the development and introduction of just-in-time materials scheduling and ISO 9002 certification.

In 1992, Norman formed his own technical services company which provided commissioning engineering during the building of the BC Ferries "Spirit of British Columbia and Vancouver Island" and the refit of the P & O vessel "Pacific Princess."

Norman was invited to join Todd Pacific Shipyards in Seattle, Washington USA in 1994 as Chief Engineer to assist in the bid preparation for three Washington State Ferries. On being awarded the contract to build the three 2000 passenger/216 vehicle ferries, Norman was tasked to create a functional engineering office with capabilities to produce the detail design for structure, mechanical and electrical disciplines. The project size and time phase required the hiring of 65 designers and the installation of a CAD network system, development of office standards and infrastructure.

In February 2001, Norman returned to Vancouver from the USA and is presently offering technical services to companies linked to the marine industry.

## Norman D. Whyte



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Member Canadian Institute of Marine Engineering

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**PROPELLER** 

Mail Stop PCT
Commissioner for Patents
P.O.Box 1450
Alexandria VA 22313-1450 USA

To Whom It May Concern:

Subject: Important Reference to distinguish between my patent technology and other 3 US patented technology (Inspector's Reference ONLY)

Dear Official,

Since European Patent Office referred 3 US patents in the preliminary international searching report for my above-identified patent application and gave NO novelty and NO inventive step written opinion for my application, I tried to contact the inspector couple of times. And, I found that inspector could not fully understand the invention by principle at the beginning. Fortunately, he understood the key points finally and told me the problem could be solved in the national stage.

For prohibiting the similar thing being happened, I would like to emphasize here again that the main function of said invention is water-separation and said invention is installed onto the front end, that is, the bow of the vessel to reduce the frontal resistance. That already stated in either my original specification or my amended specification. Furthermore, I would like to provide you some photograph of our sample invention as a

reference. Please refer the attached page 3 of this document. These photographs can ONLY be acted as a conceptual reference of our invention. The real product will be different according to the different hull structure of the vessel. Please DONOT consider it as a part of official document of the patent application.

I hope it would be helpful to your inspection. And, I wish you can evaluate my case carefully in the national stage. Your cooperation will be appreciated.

Yours Sincerely,

YANG, Shi, Heng April 22, 2005

